



## CANDIDATE'S DECLARATION

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I hereby certify that the work which is being presented in the thesis titled "**A STUDY OF PILE GROUP PERFORMANCE UNDER LATERAL LOAD**" in fulfillment of the requirement for the award of the Degree of Doctor of Philosophy and submitted to the Department of Civil Engineering, Assam Engineering College, Gauhati University, Gauhati, is an authentic record of my own work carried out during the period from January, 2009 to July, 2011 under the supervision of Dr. Palash Jyoti Hazarika, Professor, Civil Engg. Dept., Assam Engineering College, Guwahati-13.

The matter presented in this thesis has not been submitted by me for the award of any other degree of this or any other University.

Date: 23/03/2012

(UTPAL KUMAR NATH)

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This is to certify that the above statements made by the candidate are correct to the best of my knowledge.

Date: 23/03/2012

(DR. PALASH JYOTI HAZARIKA)

Professor, Deptt. of Civil Engineering  
Assam Engineering College  
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The Ph.D. Viva-Voce examination of Mr. UTPAL KUMAR NATH, Research Scholar, has been held on...23/03/2012...

Signature of Supervisor

Signature of H.O.D  
Civil Engg. Deptt.

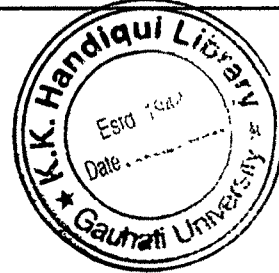
Signature of External  
Examiner



**ASSAM ENGINEERING COLLEGE**  
**DEPARTMENT OF CIVIL ENGINEERING**  
**GUWAHATI-13, ASSAM**

**Dr. P. J. Hazarika** B.E. (GU), M.E. (UOR), PhD (UOR)  
**Professor**

**CERTIFICATE**



This is to certify that the work presented in the thesis titled **“A STUDY OF PILE GROUP PERFORMANCE UNDER LATERAL LOAD”** by **UTPAL KUMAR NATH** and submitted to the Department of Civil Engineering, Assam Engineering College, Gauhati University, Guwahati has fulfilled all requirements for the award of the Degree of Doctor of Philosophy.

The thesis is the result of **Mr. Nath’s** own investigations. He has incorporated all the recommendations and suggestions made at the pre-submission seminar.

Date: 23/03/2012

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